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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,242

07/29/2003

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EXAMINER

SHEEHAN, JOHN P

ART UNIT

PAPER NUMBER

1742

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/628,242	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> John P. Sheehan	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 3 is objected to because of the following informalities:
  - I. As drafted claim 3 is a multiple dependent claim that depends from claims 2 or 3. However, claim 2 has been cancelled in the amendment submitted May 31, 2007.  
  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
  - I. The amendments changing the units in claim 3, lines 2 and 3 from "J/K" to  $J/m^3$  do not find support in the application as filed. The new units added to claim 3 do not find support anywhere in the application as filed. Applicants

state that as shown by U.S. Patent No. 5,750,230 "J/ms" is the unit of the magnetic anisotropy constant (Ku) in the SI unit system. The Examiner is not persuaded. In making this argument it is assumed that applicants intended  $\text{J/m}^3$  and not J/ms. That issue aside, U.S. Patent No. 5,750,230 is not part of the instant application and therefore cannot provide support for amendments to the claims of the instant invention. Further, in the context of U.S. Patent No. 5,750,230, the unit  $\text{J/m}^3$  is used with respect to the "in-plane magnetic anisotropy energy" (see the abstract of '230) whereas in instant claim 3 applicants are attempting to use the unit  $\text{J/m}^3$  with respect to the "magnetic anisotropy constant (Ku)". Applicants have not established that the "in-plane magnetic anisotropy energy" of '230 is the same as the "magnetic anisotropy constant (Ku)" recited in the instant claims and that the units of each of these two terms are the same.

***Claim Rejections - 35 USC § 102/103.***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1742

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Watanabe (Japanese Patent Document 09-320847, cited in the IDS submitted October 24, 2006).

Note: References to Watanabe are based on the machine translation of the Japanese document.

Watanabe teaches a magnetic memory medium as recited in the instant claims (paragraphs 0007 to 0024). Watanabe teaches specific examples of magnetic alloys for use as the magnetic layer having compositions that are encompassed by the alloy composition recited in the instant claims (for example, see Table 1, the 1<sup>st</sup> and 10<sup>th</sup> listed alloys. Alloys 1 and 10 in Watanabe's Table 1 have an average number of valence electrons of 8.34 and 8.26 respectively, which, are encompassed by applicants' claim 1. Regarding claim 5 it is the Examiner's position that Watanabe's magnetic recording medium would be expected to be used in combination with a magnetic recording head as recited in claim 5.

The claims and Watanabe differ in that Watanabe is silent with respect to the order parameter (S) recited in claim 1 and the magnetic anisotropy constant (Ku) values recited in claim 3.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Watanabe's example alloys have compositions that are encompassed by the instant. In view of this,

Art Unit: 1742

Watanabe's example alloys would be expected to possess all the same properties as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

### ***Response to Arguments***

7. Applicant's arguments filed May 31, 2007 have been fully considered but they are not persuasive.

Applicants argue that the specific example alloys cited by the Examiner in the statement of the rejection do not possess an order parameter (S) of 0.5 to 1 as recited in the instant claims. In attempting to support their statement applicants submitted Figure 4-6, Figure 4-7, and Figure 4-8. The Examiner is not persuaded. The figures submitted by applicants are not in affidavit or declaration form and therefore are given no weight. Further, in view of the fact that the figures are not in affidavit or declaration form, applicants' arguments are considered to be no more than unsupported attorney's argument, see MPEP 716.01(c).

**I. < TO BE OF PROBATIVE VALUE, ANY  
OBJECTIVE EVIDENCE SHOULD BE  
SUPPORTED BY ACTUAL PROOF**

Objective evidence which must be factually supported  
by an appropriate affidavit or declaration to be

of probative value includes evidence of unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant. See, for example, *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984) ("It is well settled that unexpected results must be established by factual evidence." "[A]ppellants have not presented any experimental data showing that prior heat-shrinkable articles split. Due to the absence of tests comparing appellant's heat shrinkable articles with those of the closest prior art, we conclude that appellant's assertions of unexpected results constitute mere argument."). See also *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972); *Ex parte George*, 21 USPQ2d 1058 (Bd. Pat. App. & Inter. 1991).

"It is well settled that unexpected results must be established by factual evidence. Mere argument or conclusory statements in the specification do not suffice." *In re Deblauwe*, 222 USPQ 191, 196 (Fed. Cir. 1984). Mere lawyer's arguments and conclusory statements in the specification, unsupported by objective evidence, are insufficient to establish unexpected results." *In re Wood, Whittaker, Stirling and Ohta*, 199 USPQ 137, 140 (CCPA 1978), also see MPEP 716.01(c).

## **II. < ATTORNEY ARGUMENTS CANNOT TAKE THE PLACE OF EVIDENCE**

The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant.

Further, even if Figures 4-6, 4-7 and 4-8 were submitted in affidavit or declaration form they would still not be persuasive. For example, (1) there is no description as to how the data in each of the figures was generated; (2) it is not clear what the units are on the vertical axis of Figure 4-6; (3) it is not clear whether the units on Figure 4-6 are the same as the units on Figure 3 of the reference, thus making a comparison of the 2 figures questionable; (4) applicants state that Figure 3 of '847 "is believed to be equivalent to an alloy formed at a substrate temperature lower than 2500C in Fig. 4-6" (applicants' response page 6, emphasis added by the Examiner), etc.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

JPS